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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,509	01/11/2001	Derek Lidow	P/3748-4	8398

2352 7590 04/15/2003

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EXAMINER
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MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/758,509	LIDOW, DEREK
	Examiner	Art Unit
	Susanna M. Diaz	3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 March 2003.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-132 is/are pending in the application.
- 4a) Of the above claim(s) 29-69 and 98-132 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-28 and 70-97 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
- Certified copies of the priority documents have been received.
  - Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. This Final Office action is responsive to Applicant's amendment filed March 10, 2003.

Claims 1-3, 7-21, 28, 70-90, and 97 have been amended.

Claims 1-132 are pending; however, claims 29-69 and 98-132 stand as non-elected claims and are therefore withdrawn from consideration. (Please cancel non-elected claims 29-69 and 98-132 in response to this Office action.)

Claims 1-28 and 70-97 are presented for examination.

2. The previously pending claim objection to claim 75 is withdrawn in response to Applicant's claim amendment. However, the objection to claim 89 is maintained because there is still a typographical error.

The previously pending rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, regarding the interchanging of the phrases "customer demands" and "forecasted demands" and the interchanging of the phrases "at least one customer" and "the customer" as well as "at least one supplier" and "the supplier" are withdrawn in response to Applicant's claim amendments. However, the rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, regarding the use of "valid" and confusion in claim 26 over the various recited receiving steps are maintained. Applicant's argument concerning the use of the word "valid" is deemed to be non-persuasive for the reasons discussed below. Additionally, Applicant has not addressed the rejection of claim 26 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph; therefore, said rejection is maintained.

***Response to Arguments***

3. Applicant's arguments filed March 10, 2003 have been fully considered but they are not persuasive.

Regarding the rejection of claims 1-28 and 70-97 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, Applicant argues:

Applicant respectfully submits that the term "valid" is defined in the specification and drawings, and does not refer only to feasibility. A forecasted demand must comply with predetermined rules in order to be valid, beyond, for example, ensuring a supplier is able to satisfy forecasted demands.

Applicant respectfully directs the Examiner's attention to pages 12-13, 15-17 and 18 of the specification for support of applicant's definition of the term, "valid." As described in the specification, the term "valid" refers to the completeness of a forecasted demand (see page 12, line 20 - page 13, line 3). For example, the present invention assures there is one forecast for every planning/ship-to location and part number combination (see page 17). Further, a forecasted demand is determined to be valid after determining that every part number identified in the forecasted demand has a specified quantity. Moreover, a forecasted demand is identified as valid when a requested part number is verified to refer to an actual part. Also as defined in the specification, a "valid" forecasted demand requires that the contents of the forecasted demand are contracted for, as between a customer 72 and an entity running a supply chain server 74. (Pages 3-4 of Applicant's Response)

The specification merely provides various examples of validation. A demand is considered to be "valid" depending on the type of validation used. However, the recitation of the term "valid" in the claims without a corresponding recitation of the type of validation being used, i.e., the context in which validity of a demand is judged, makes it difficult to ascertain the metes and bounds of the term "valid," thereby rendering the

claims vague and indefinite. Applicant's response further attenuates such confusion because it is not clear whether Applicant asserts that the word "valid" is meant to be interpreted broadly or whether Applicant intends the word "valid" to be limited to the context of the specific types of validations disclosed in the specification.

Regarding the rejection of claims 1-28 under 35 U.S.C. 101, Applicant argues that "Title 35, §101 of the United States Code does not identify any limitation with respect to the technological arts." (Page 5 of Applicant's Response) The Examiner respectfully disagrees. Regarding the requirement under 35 U.S.C. § 101 that a claimed invention be limited to the technological arts in order to be deemed statutory, the Examiner submits that the phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts." See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts."

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature," "natural phenomena," and "abstract ideas." See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful,

concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Water-Freeman-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts." The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Walter-Freeman-Abele test has little,

if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a “useful, concrete and tangible result.” See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no “business method exception” since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that “[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112.” See *State Street Bank & Trust Co.* at 1377. Both of these analyses go towards whether the claimed invention is non-statutory because of the presence of an abstract idea. State Street never addressed the first part of the analysis, i.e., the “technological arts” test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) **was already determined to be within the technological arts** under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences in affirming a §101 rejection finding the claimed invention to be non-statutory for failing the technological arts test. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

What is indeed important to note in the *Bowman* decision is that the Board acknowledged the dichotomy of the analysis of the claims under 35 U.S.C. § 101, thereby emphasizing the fact that not only must the claimed invention produce a “useful, concrete and tangible result,” **but that it must also be limited to the technological**

**arts** in order to be deemed statutory under the guidelines of 35 U.S.C. § 101. The Board very explicitly set forth this point:

[1] We agree with the examiner. Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment. As noted by the examiner, the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart [answer, page 5]. The Examination Guidelines for Computer-Related Inventions are not dispositive of this case because there is absolutely no indication on this record that the invention is connected to a computer in any manner.

Despite the express language of 35 U.S.C. §101, several judicially created exceptions have been excluded from subject matter covered by Section 101. These exceptions include laws of nature, natural phenomenon, and abstract ideas. See *Diamond v. Diehr*, 450 U.S. 175, 185, 209 USPQ 1, 7(1981). We interpret the examiner's rejection as finding that the claimed invention before us is nothing more than an abstract idea because it is not tied to any technological art or environment. Appellant's argument is that the physical (even manual) creation of a chart and the plotting of a point on this chart places the invention within the technological arts.

The phrase "technological arts" has been created to offer another view of the term "useful arts." The Constitution of the United States authorizes and empowers the government to issue patents only for inventions which promote the progress [of science and] the useful arts. We find that the invention before us, as disclosed and claimed, does not promote the progress of science and the useful arts, and does not fall within the definition of technological arts. The abstract idea which forms the heart of the invention before us does not become a technological art merely by the recitation in the claim of "transforming physical media into a chart" [sic, drawing or creating a chart] and "physically plotting a point on said chart."

In summary, we find that the invention before us is nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed

to be nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts. For all these reasons just discussed, we sustain the examiner's rejection of the appealed claims under 35 U.S.C. §101. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669, 1671 (BdPatApp&Int 2001)

Similarly, in the present application, claims 1-28 are deemed to be non-statutory because, while they produce a useful, concrete, and tangible result, this result is not limited to the technological arts; all recited steps could be performed manually by a human as admitted by the Applicant on lines 4-6 of page 8 of the specification, thereby reinforcing the fact that Appellant's invention fails to "[p]romote the progress of science and useful arts," as intended by the United States Constitution under Art. I, §8, cl. 8 regarding patent protection.

In conclusion, the Examiner submits that claims 1-28 do not meet the technological arts requirement under 35 U.S.C. § 101, as set forth by the United States Constitution and upheld by the Courts, and are therefore unpatentable.

Regarding the rejection under 35 U.S.C. 102(e), Applicant argues, "While Bellini teaches data exchange substantially in real time, Bellini does not teach or suggest performing an analysis to determine whether customer forecasted demands are valid, as defined in applicant's specification. The Examiner is respectfully referred to the foregoing discussion regarding the term, 'valid,' with respect to the Examiner's rejection under 35 U.S.C. §112, second paragraph." (Page 6 of Applicant's Response) In response to Applicant's argument that the references fail to show certain features of

Applicant's invention, it is noted that the features upon which applicant relies (i.e., the various potential connotations of the word "valid" described in the specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As defined in Merriam Webster's Collegiate Dictionary (10<sup>th</sup> ed.), the word "valid" may reasonably be interpreted much more broadly than asserted by the Applicant. Merriam Webster's Collegiate Dictionary (10<sup>th</sup> ed.) defines "valid" as "1. having legal efficacy or force," "2a. well-grounded or justifiable," "2b. logically correct," "3. appropriate to the end in view," and "4. conforming to accepted principles of sound biological classification." As stated in the art rejection, Bellini teaches that the feasibility of fulfilling the forecasted demands is evaluated. This interpretation of "determin[ing] whether the customer forecasted demands are valid" clearly conforms to the definitions of "valid" (particular 2a and 2b) found in Webster's Collegiate Dictionary (10<sup>th</sup> ed.).

Regarding the rejection under 35 U.S.C. 102(e), Applicant argues, "Applicant respectfully submits that the present invention receives customer forecasted demands and performs an analysis to determine validity before sending the customer forecasted demands to at least one supplier. This is in contradistinction to Bellini, wherein communication is provided directly between the various enterprise players (i.e., a customer and a supplier)." (Page 6 of Applicant's Response) The Examiner respectfully disagrees. Enterprise B's (i.e., the at least one supplier's) planning server is part of the

ERP system. It is not until the planning server assists enterprise B in analyzing the demand forecast to determine if enterprise B approves the forecast (i.e., it is decided that the forecast is valid) that enterprise B actually “updates its forecast and imports the updated forecast into its planning system” (col. 10, lines 43-49). This may reasonably be interpreted as “the messaging system send[ing] the customer forecasted demands to the at least one supplier when the forecasted demands are valid” since enterprise B does not actually import the updated forecast until said forecast is determined to be valid. Furthermore, the term “valid” is so broad that a “valid” customer forecasted demand may reasonably read on a customer forecasted demand in which all necessary data is properly filled out by a customer and sent to the supply chain server in the proper format. Since Bellini’s supply chain server communicates data using an EPI protocol, a customer forecasted demand submitted using the wrong protocol (e.g., a protocol that is incompatible with the EPI protocol) would be deemed invalid and could not be forwarded to a supplier.

Applicant’s arguments are non-persuasive; therefore, the art rejection is maintained. Also, please note that the abstract is now objected to for the reason explained below.

### ***Specification***

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract

on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because it is too long. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

6. Claim 89 is objected to because of the following informality:

Claim 89, line 3, delete "sends the abort code"

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-28 and 70-97 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the step of "analyzing the forecasted demands to determine whether the forecasted demands are valid" (lines 3-4); however, it is unclear what is meant by determining whether or not forecasted demands are "valid." For example,

does "valid" mean "feasible" as in the forecasted demands can feasibly be filled by the supply chain network or does "valid" mean "accurate" as in the supply chain network determines that the information used by the customer to assess forecasted demands is analyzed correctly. For examination purposes, "valid" will be interpreted as "feasible" as in the forecasted demands can feasibly be filled by the supply chain network. Claim 70 mirrors claim 1; therefore, the same rejection applies.

Claim 26 recites that "the receiving is performed by a supply chain server in a supply chain network"; however, it is not clear whether "the receiving" refers to the receiving of forecasted demands (recited in line 2 of claim 1) or the receiving of a return request (recited in lines 2-3 of claim 26). For examination purposes, the latter of the two will be assumed.

Claims 2-25, 27, 28, and 71-97 are dependent from claims already rejected above and therefore inherit the rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, of the respective claims.

Appropriate correction and/or clarification is required.

#### ***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim, the recited process must somehow apply, involve, use, or advance the technological arts. Further, mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process. In the present case, claims 1-28 fail to apply, involve, use, or advance the technological arts. As a matter of fact, lines 4-6 of page 8 of the specification state that the invention may be implemented manually. Notably, claim 8 recites that “the customer demands are received by a supply chain server.” Claim 14 recites that “the forecasted demands are received in one of an email, a spreadsheet, and an XML format” and claim 26 recites that “receiving is performed by a supply chain server in a supply chain network.” Nonetheless, these recitations of technology merely equate to nominal recitations that fail to apply, involve, use, or advance the technological arts. For example, these nominal recitations of technology fail to expressly clarify that the underlying process of the invention requires the use of technology; therefore, claims 1-28 are deemed to be non-statutory.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

12. Claims 1, 5-7, 15, 21, 70, 74-76, 84, and 90 are rejected under 35 U.S.C. 102(e) as being anticipated by Bellini et al. (U.S. Patent No. 5,974,395).

Bellini discloses a system for processing customer forecasted demands, the system comprising:

[Claim 70] a supply chain server coupled to at least one customer and at least one supplier, the supply chain server including a messaging services system and an ERP system (col. 3, lines 53-65; col. 5, lines 60-67; col. 6, lines 41-51; col. 7, lines 18-38); wherein:

the messaging services system receives customer forecasted demands from the at least one customer (col. 3, lines 53-65; col. 7, lines 39-50; col. 10, lines 29-54);

the ERP system analyzes the customer forecasted demands received by the messaging services system to determine whether the customer forecasted demands are valid (col. 7, line 58 through col. 8, line 62 – The supply chain planning engine, which is part of the overall ERP system, accesses information about all enterprises in

the supply chain to determine if a “promise” can be made to fulfill the order request, i.e., feasibility of fulfilling the forecasted demands is evaluated); and

the messaging system sends the customer forecasted demands to the at least one supplier when the customer forecasted demands are valid (col. 7, line 58 through col. 8, line 62);

[Claim 74] further comprising a contractual agreement requiring the supplier to follow a production protocol in light of the customer forecasted demands sent by the messaging services system (col. 6, lines 41-51; col. 7, lines 39-50; col. 8, lines 7-61 – A “promise” is interpreted as a type of contractual agreement and it can refer to a promise to supply products, i.e., as part of a production protocol, or parts, i.e., as part of an inventory protocol);

[Claim 75] further comprising a contractual agreement requiring the supplier to follow an inventory protocol in light of the customer forecasted demands sent by the messaging services system (col. 6, lines 41-51; col. 7, lines 39-50; col. 8, lines 7-61 – A “promise” is interpreted as a type of contractual agreement and it can refer to a promise to supply products, i.e., as part of a production protocol, or parts, i.e., as part of an inventory protocol);

[Claim 76] wherein the messaging services system sends an exception notice to the customer when the ERP system determines that the customer forecasted demands are not valid (col. 8, lines 35-40 – A promise is withdrawn if it is determined that the supply chain network cannot fulfill the requested order);

[Claim 84] wherein the customer forecasted demands relate to products (col. 7, lines 39-50; col. 9, lines 1-8);

[Claim 90] wherein the supply chain server is further connected to at least one logistics provider (col. 7, lines 1-9, 58-64); and

the ERP system further sends a command to the logistics provider so that the logistics provider transfers products corresponding to the forecasted demands from the supplier to the customer in response to orders from the supply chain server (col. 7, lines 1-9, 58-64).

[Claims 1, 5-7, 15, 21] Claims 1, 5-7, 15, and 21 recite a method with limitations corresponding to those recited in claims 70, 74-76, 84, and 90; therefore, the same rejection applies.

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 12-14, 16-18, 22-28, 81-83, 85-87, and 91-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellini et al. (U.S. Patent No. 5,974,395), as applied to claims 1, 21, 70, and 90 above.

[Claims 81-83] Bellini's invention provides a data specification format which allows various enterprises to communicate with one another bi-directionally. An electronic planning interchange data protocol facilitates the transfer of data among "enterprises running disparate transactional execution systems" (col. 2, line 7 through col. 3, line 28), thereby implying that Bellini can handle data submitted in multiple formats. However, Bellini does not explicitly disclose who determines the format and in what format the forecasted demands are submitted nor if the messaging services system converts the forecasted demands into a different format. Since one of the benefits of Bellini's invention is to be able to handle data submitted in multiple formats, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to allow forecasted demands to be in a format determined by the customer (claim 81), e.g., upon submission of forecasted demands by the customer, in order to provide to the customers the convenience of using their preferred internal supply chain system to submit forecasted demands to Bellini's centralized supply chain planning engine. Further, since Bellini's invention converts data to an electronic planning interchange data format, this implies that Bellini's messaging services system does indeed convert the forecasted demands into a different format if the customer does not submit the forecasted demands in the electronic planning interchange data format (as per claim 82). Additionally, regarding claim 83, it should be noted that EDI stands for electronic data interchange. The purpose of EDI is to allow different enterprises with different internal communications protocols and different internal data formats to be able to communicate with one another using a common format, called

EDI. Therefore, EDI is functionally equivalent to Bellini's EPI (electronic planning interchange) data protocol as described in col. 3, lines 15-21 of Bellini. Consequently, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini's invention to receive forecasted demands in an EDI format in order to make Bellini's invention compatible with a format similar in function to Bellini's EPI, thereby making Bellini more marketable to a wider range of enterprises especially since EDI is a commonly used data format for communications among various enterprises.

[Claims 85-87] Bellini explicitly teaches the forecasting of demands related to products, yet he fails to disclose the forecasting of demands related to services, bandwidth in a network, and airline tickets. However, Official Notice is taken that it is old and well-known in the art of demand management to forecast demands for services, bandwidth in a network, and airline tickets. As with any product, it is essential to forecast demands for services, bandwidth in a network, and airline tickets in order to allow a supplier of such commodities to effectively plan to meet customer demands for each commodity. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini to be able to handle forecasted demands related to services (claim 85), bandwidth in a network (claim 86), and airline tickets (claim 87) in order to allow a supplier of such commodities to effectively plan to meet customer demands for each commodity, thereby making Bellini's invention more marketable across a wide range of enterprises.

[Claims 91-92] Bellini does not explicitly teach the use of an extranet manager to provide tracking information relating to products via a web site accessible by the customers and suppliers; however, Official Notice is taken that such an extranet manager to provide tracking information relating to products via a web site accessible by the customers and suppliers is old and well-known in the art of supply chain management. Extranets have made the supply chain more fluid by allowing both customers and suppliers to have access to pertinent information from one another's internal system. Also, placing this inter-enterprise information on a web site has made such information more easily and globally accessible to the multiple enterprises involved in the supply chain process. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini's supply chain server to include an extranet manager that provides tracking information relating to the products (claim 91) by producing a web site accessible by at least one of the customer and the supplier (claim 92) in order to make the supply chain more fluid by allowing both customers and suppliers to have access to pertinent information from one another's internal system. Also, placing this inter-enterprise information on a web site makes such information more easily and globally accessible to the multiple enterprises involved in the supply chain process.

[Claims 93-94] As per claim 93, Bellini teaches the use of tracking information that includes information regarding the status of the product through potential bottlenecks between the supplier and the customer (col. 6, lines 41-51; col. 9, lines 39-45).

However, Bellini does not teach that said bottlenecks include customs as per claim 94. Official Notice is taken that it is old and well-known in the art of supply chain management that bottlenecks due to passing items through customs (e.g., when the ordered items are being delivered from another country) are often taken into account when assessing an accurate shipment delivery date. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini to take bottlenecks such as those caused by items passing through customs (claim 94) into account when assessing a shipment delivery date in order to facilitate determination of as accurate as a shipment delivery date as possible when items are being delivered from another country.

[Claims 95-97] As discussed above, Bellini teaches a supply chain server coupled to a logistics provider, a messaging services system, and an ERP system; however, Bellini does not explicitly discuss the details of processing return requests for a particular product to a corresponding supplier. Official Notice is taken that it is old and well-known in the art of supply chain management to enable the processing of return requests for a particular product to a corresponding supplier. Furthermore, Official Notice is taken that it is also old and well-known in the art to provide customers with a desired replacement product, which is either available from suppliers in the system or for which forecasted demands need to be adjusted when the replacement product is not available from the suppliers in the system. These return and replacement policies encourage good relations between suppliers and their customers, especially when

suppliers tout a 100% satisfaction guaranteed policy. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Bellini to enable the processing of return requests for a particular product to a corresponding supplier as well as providing customers with a desired replacement product, which is either available from suppliers in the system or for which forecasted demands need to be adjusted when the replacement product is not available from the suppliers in the system (as per claims 95-97), in order to encourage good relations between suppliers and their customers, especially when suppliers tout a 100% satisfaction guaranteed policy.

[Claims 12-14, 16-18, 22-28]      Claims 12-14, 16-18, and 22-28 recite a method with limitations corresponding to those recited in claims 81-83, 85-87, and 91-97; therefore, the same rejection applies.

15.      Claims 2-4, 8-11, 19-20, 71-73, 77-80, and 88-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellini et al. (U.S. Patent No. 5,974,395), as applied to claims 1 and 70 above, in view of Landvater (World Class Production and Inventory Management).

[Claims 71-73, 77-80]      As discussed above, Bellini's supply chain planning engine receives customer forecasted demands, yet Bellini provides no explicit explanation regarding further analysis of these customer forecasted demands. However, Landvater teaches the importance of optimizing demand management in order to stabilize the

overall operations of a supply chain, thereby promoting more smoothly and effectively run operations (page 71). Landvater extrapolates forecasted demands based on expected demand by the customer (see at least page 74), historical data of the forecasted demands (see at least page 75), and information supplied by the customer (see at least page 74). Taking all of these factors into account leads to a more accurate forecast of demands; therefore, the Examiner asserts that it would have been obvious to one ordinary skill in the art at the time of Applicant's invention to incorporate with Bellini the extra step of extrapolating customer forecasted demands based on expected demand by the customer (claim 71), historical data of the forecasted demands (claim 72), and/or information supplied by the customer (claim 73), all taught by Landvater, in order to stabilize the overall operations of a supply chain, thereby promoting more smoothly and effectively run operations (as also taught by Landvater).

Further, Landvater promotes obtaining as complete and accurate information as possible when analyzing forecasted demands (see at least pages 70-71, 75) in order to optimize the demand management assessments; therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to implement with the modified Bellini a check to determine that all information is complete and accurate as part of the analysis of the forecasted demands (claim 77) in order to optimize the demand management assessments.

Additionally, as per claim 79, while Bellini teaches use of the messaging services system for sending suppliers valid demands (as discussed in the art rejection above), Bellini does not expressly discuss accumulated demands (as per claims 78-80).

However, Landvater teaches the accumulation of forecasted demands that relate to demands for a plurality of time periods from a plurality of customers (see at least pages 70, 75-78, 79-80, 85). Again, this contributes to Landvater's teaching of the importance of optimizing demand management in order to stabilize the overall operations of a supply chain, thereby promoting more smoothly and effectively run operations (page 71). Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt the modified Bellini to collect information regarding the accumulation of customer forecasted demands that relate to demands for a plurality of time periods from a plurality of customers (claims 78-80) to optimize demand management in order to stabilize the overall operations of a supply chain, thereby promoting more smoothly and effectively run operations.

[Claims 88-89] While Bellini does not explicitly teach the cancellation of customer orders related to customer forecasted demands, Landvater discusses this as a common problem in the industry (see at least page 70). Neither Bellini nor Landvater specifically discloses use of an abort code/command to cancel a customer order; however, Official Notice is taken that the use of abort codes and commands to cancel orders are old and well-known in the art. These abort codes and commands often provide a shortcut to identify the details of an order, thereby making it easier and more efficient to quickly cancel a previously placed order. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to incorporate with the modified Bellini an abort code and command that a customer can

use to cancel an order corresponding to one of the customer forecasted demands through Bellini's messaging and ERP systems (as per claims 88 and 89) in order to provide a shortcut to identify the details of an order, thereby making it easier and more efficient to quickly cancel a previously placed order.

[Claims 2-4, 8-11, 19-20] Claims 2-4, 8-11, and 19-20 recite a method with limitations corresponding to those recited in claims 71-73, 77-80, and 88-89; therefore, the same rejection applies.

***Conclusion***

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703)308-1113.

Effective May 1, 2003, any response to this action should be mailed to:

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450**

or faxed to:

**(703)305-7687** [Official communications; including  
After Final communications labeled  
"Box AF"]

**(703)746-7048** [Informal/Draft communications, labeled  
"PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 22202, 7<sup>th</sup> floor receptionist.

Susanna M. Diaz  
Patent Examiner  
Art Unit 3623  
April 13, 2003

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